WHAT IS CLAIMED IS:

1. A method for encrypting and compressing multimedia data, comprising the steps of:

creating Discrete Cosine Transform (DCT) coefficients by applying input multimedia data to a DCT unit, and quantizing the created DCT coefficients;

encrypting and compressing a transformed Differential Coefficient (DC coefficient) and a transformed Amplitude Coefficient (AC coefficient) by transforming encoded DC and AC coefficients depending on a certain encryption key at the time of entropy encoding quantized DC and AC coefficients of the quantized DCT coefficients; and

Huffmann coding the encrypted DC and AC coefficients using a Huffmann table and outputting the coded DC and AC coefficients.

2. The method according to claim 1, wherein the step of encrypting and compressing the DC and AC coefficients comprises the steps of:

performing Differential Pulse Code Modulation (DPCM) of the quantized DC coefficient and Run Length Coding (RLC) of the quantized AC coefficient;

determining the encryption key of the AC and DC coefficients and a random constant r indicating a start bit of the encryption key, using variable

length information including a Variable Length Code (VLC) and a Variable Length Integer (VLI), of each of the DC and AC coefficients obtained through the DPCM and the RLC; and

encrypting the AC and DC coefficients using the determined encryption key.

3. The method according to claim 2, wherein the step of encrypting the AC and DC coefficients comprises the steps of:

determining whether a value of an r-th bit is "1" in the determined encryption key of the DC coefficient; and

transforming the DC coefficient by performing an exclusive logical sum operation between the VLC of the DC coefficient and 11111111 if the determined value is "1".

4. The method according to claim 2, wherein the step of encrypting the AC and DC coefficients comprises the steps of:

determining whether a value of an r-th bit is "1" in the determined encryption key of the AC coefficient;

right-shifting the VLI of the AC coefficient if the determined value is "1";

determining the VLC of the AC coefficient through the right-shifted

VLI using the Huffmann table; and

transforming the AC coefficient using the determined VLC and VLI.

5. The method according to claim 4, wherein the encryption key includes first and second symmetric keys, and the symmetric keys are VLCs of the AC and DC coefficients, respectively.

6. An apparatus for encrypting and compressing multimedia data, comprising:

a DCT unit for creating DCT coefficients including AC and DC coefficients by DCT transforming input multimedia data into discrete signals;

a quantization unit for quantizing the created DCT coefficients using a quantization table; and

an entropy encryption encoding unit for encrypting quantized AC and DC coefficients by entropy encoding the quantized AC and DC coefficients using a certain encryption key.

7. The apparatus according to claim 6, wherein the entropy encryption encoding unit comprises:

a DPCM unit for pulse modulating the quantized DC coefficient of the DCT coefficients;

an RLC unit for scanning the quantized AC coefficient of the DCT coefficients in a zig-zag run manner;

an encryption unit for encrypting the DC and AC coefficients using a VLC and a VLI of each of the DC and AC coefficients obtained by the DPCM unit and the RLC unit; and

a Huffmann coding unit for Huffmann coding the encrypted DC and AC coefficients using a Huffmann table.